

Path.

1069

ly

Path. 1069 ^{ly}

(Pollo)

391 Path. 897 ¹⁰⁶⁹ 7

m.

Patrol. Spec.
observations

Doc.

OBSERVATIONS
ON THE
DISEASES

WHICH APPEARED

IN THE ARMY ON ST. LUCIA,

In December, 1778; January, February, March,
April, and May, 1779:

R TO WHICH ARE PREFIXED

REMARKS,

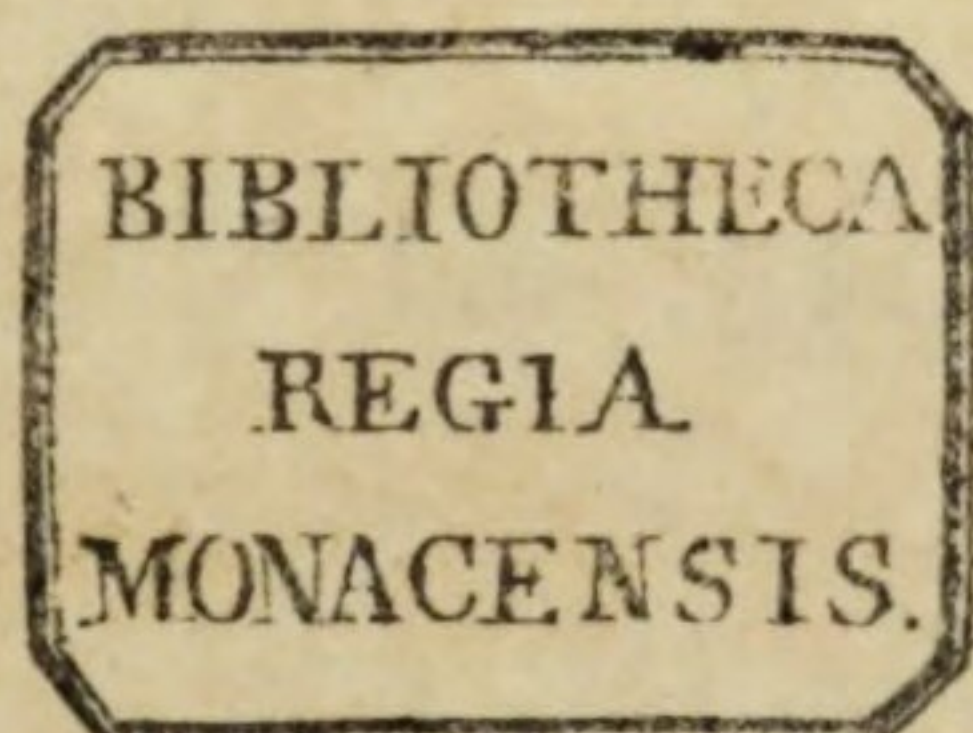
Calculated to assist in ascertaining the Causes, and in explaining the Treatment of those Diseases.

BARBADOS;

PRINTED FOR THE AUTHOR,

By JOHN ORDERSON, and COMPANY.

M,DCC,LXXX.



TO HIS EXCELLENCY
THE HON. JOHN VAUGHAN,
GENERAL AND COMMANDER IN CHIEF
OF
HIS MAJESTY'S FORCES
IN THE WEST-INDIES;
COLONEL OF THE 46 REGIMENT OF FOOT;
GOVERNOR OF FORT WILLIAM
IN NORTH-BRITAIN;
AND
MEMBER OF PARLIAMENT FOR THE CITY
OF BERWICK:

THE FOLLOWING OBSERVATIONS,
ARE MOST RESPECTFULLY INSCRIBED,

BY
HIS EXCELLENCY'S
MOST OBEDIENT SERVANT,

J O H N R O L L O.

THE CONTENTS.

INTRODUCTION

Page i to v.

PART I.

Observations calculated to assist in ascertaining the Causes, and in explaining the Treatment of the Diseases, which appeared in the Army on St. Lucia in December, 1778; January, February, March, April, and May, 1779.

CHAP. I.

A Description of different Places of St. Lucia, which were or may be occasionally occupied by the Army; with a general Account of the Island premised.

Sect. I. Of St. Lucia in general	1
II. Of Morne Fortune	4
III. Of Grand Cul de Sac	5
IV. Of the Carenage	6
V. Of Gros Islet	8
VI. Of Souffrir and to Windward of it	ib.

CHAP. II.

A Register of the Weather from the 14th of December, 1778, to the 31st of May, 1779, inclusive

11

CHAP. III.

A Table containing a List of the Diseases, and an Account of the Number of Men in Health on the different Situations to be described

16

CHAP. IV.

Of the Situations of the Island on which the Men specified in the Table were fixed; and an Endeavor to determine the most healthfull.

Sect. I. Of the Situations on which the Men were fixed

18

Sect. II.

C O N T E N T S.

Sect. II. Of the most healthy Situations 19

P A R T. II.

Observations on the Diseases which appeared in the Army on St. Lucia, in December, 1778; January, February, March, April, and May, 1779.

C H A P. I.

Of the History of the Diseases which appeared in the Months specified.

Sect. I. Of the History of the Intermittent	23
II. Of the History of the Remittent	24
III. Of the History of the Dysentery	25
IV. General Continuation of the History	26

C H A P. II.

Of the Causes of the Diseases described 29

C H A P. III.

Of the Treatment of the Diseases described.

Sect. I. Of the Treatment of the Intermittent	32
II. Of the Treatment of the Remittent	34
III. Of the Treatment of the Dysentery	36
VI. Of the Treatment of particular Symptoms	38
1. Vomiting	ib.
2. Looseness	39
3. Comatose Disposition	40
4. Hiccup	ib.
V. Of the Treatment of Appearances, the Effect of the Diseases described	41
1. Pectoral Complaints	ib.
2. Hypochondriac Affection	42
3. OEdematous Swellings in the lower Extremities	ib.
Abdominal Swellings	ib.
5. A weak State of the Stomach with Flatulence	43
6. Costiveness	ib.
7. Diarrhoea	ib.

CHAP.

C O N T E N T S.

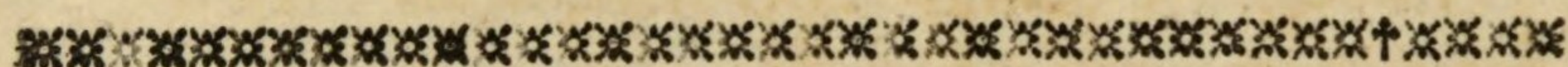
C H A P. IV.

A Description of several Cases selected from the Table,
in the Order observed in the History of the Diseases.

Sect, I. Cases of the Intermittent	44
II. Cases of the Remittent	51
III, Cases of the Dysentery	60

C H A P. V.

Of Relapses	63
-------------	----



E R R A T A.

Page v Line 5, For *Indivtial*, read *Individual*.

3	7,	for <i>finds</i> , read <i>find</i> .
3	31,	for <i>jully</i> , read <i>fully</i> .
5	10,	for <i>with</i> , read <i>by</i> .
5	22,	for <i>clay</i> , read <i>clayish</i> .
10	13,	for <i>calcerous</i> , read <i>calcareous</i> .
13	5,	for <i>was</i> , read <i>were</i> .
14	27,	for <i>succeeding Months</i> , read <i>succeeding Month</i> .
18	11,	omit the Word <i>on</i> .
20	18,	for <i>seventeen</i> , read <i>eighteen</i> .
21	30,	for <i>in OEdematous</i> , read <i>OEdematous</i> .
22	15,	for <i>Sare</i> , read <i>State</i> .
23	17,	for <i>followed the Paroxysm</i> , read <i>terminated the Paroxysm</i> .
23	17,	for <i>dhivering</i> , read <i>Shivering</i> .
25	18,	for <i>become</i> , read <i>became</i> .
28	9,	for <i>preceding</i> , read <i>proceeding</i> .
30	32,	for <i>more frequent</i> , read <i>most frequent</i> .
33	2,	for <i>Remmittent</i> , read <i>Remittent</i> .
33	11,	for <i>Evhibition</i> , read <i>Exhibition</i> .
34	14,	for <i>was</i> , read <i>were</i> .
36	22,	for <i>Simouraba</i> , read <i>Simarouba</i> .
37	15,	for <i>Effects</i> , read <i>Effects</i> .
37	24,	for <i>assumed</i> , read <i>assumed</i> .
37	25,	for <i>in the much</i> , read <i>in much</i> .
46	24,	for <i>is</i> , read <i>are</i> .
52	21,	for <i>Delium</i> , read <i>Delirium</i> .
52	28,	for <i>Prepartion</i> , read <i>Preparation</i> .

INTRODUCTION.

THE Caribbee Islands have always proved unhealthy and fatal to the European Constitution: But to none so peculiarly as to the Soldier. The Nature of his Duty exposes him to meridian Heat and midnight Air, to every Species of Fatigue, and to every Cause which can possibly produce Disease. The Effects of this Situation, have been no where so unfortunately demonstrated, as on the Island of St. Lucia.

The extensive Sickness and Mortality in the Army, a little Time after our landing on that Island, did not fail to excite every medical Effort. The Want of proper Places for the Reception of Sick, distant Posts which prevented a timely Application, and Something in the Nature of the Diseases which required a different Treatment, by a more early and less timid Exhibition of Medicine, concurred in rendering the Practice not apparently successful. We acknowledge, that we met with many Difficulties, and often regretted our Deficiency in Experience; these we attempted to remove, by an assiduous Attention to the Nature and Symptoms of the Diseases which appeared, and to the Effects of Medicines. In this Pursuit we were assisted by the Observations of the justly celebrated Cullen, Lind, Cleghorn,
A and

and of Doctor Mackittrick, Antigua; and medical Gentlemen will easily perceive how far we are indebted to them, even tho' we adduce no Quotations.

The Result of this Attempt is now submitted to the Candor of the medical Gentlemen of the Army; and we sincerely hope it may induce Gentlemen, whose Abilities and long services have enabled them to ascertain the most effectual Means of preventing and removing the Diseases, to which an Army in all its various Situations in the West-Indies may be subjected, to communicate them.

The Observations were made in December, 1778; January, February, March, April, and May, 1779; which takes in the Period of the Troops first landing on St. Lucia. A bad State of Health and a Departure from the Island, prevented us from prosecuting them any further; for these Reasons, the Plan we had laid down to Ourselves, could not be carried on to the Extent originally designed. However we have still retained it, and altho' subject to many Defects, we trust it to the Liberality and Generosity of those, whose Knowledge and Experience entitle them to the Respect and Esteem of every one, convinced of the Utility of the medical Profession.

The Arrangement, or Plan alluded to, follows:

I. A Description of different Places of St. Lucia, which were, or may be occasionally occupied by the Army, with a general Account of the Island premised.

II. A Register of the Weather from the 14th December, 1778, to the 31st May, 1779, inclusive.

III. A Table, containing a List of the Diseases, and an Account

Account of the Number of Men in Health on the different Situations to be described.

IV. Of the Situations of the Island, on which the Men specified in the Table, were fixed, and an Endeavor to determine the most healthful.

V. Observations on the Diseases marked in the Table, in their History, Cause, and Treatment.

VI. A Particular Description of several Cases, selected from the Table.

VII. And, Lastly: Observations on the Means of preventing Relapses.

A Description of different Places of St. Lucia, was thought necessary, to assist in ascertaining the Causes of its Diseases, to enable more clearly to point out the Parts of the Island, on which the Men were fixed, and to determine the most healthy Situations.

A Register of the Weather has been always thought useful, and from it many trace Causes of Disease; for these Reasons we have given one. By being kept on Board of a Transport, it must be defective; however, it will serve to shew the State of the Atmosphere, the Direction and Degree of Winds, and the rainy Days.

A Table, comprehending, 1. The Patients we had an Opportunity of attending to, with their Diseases, and the different Posts on which they were placed, annexed to each. 2. The Number of Men in Health, originally on each Situation; the Number of Sick, Relapses, and Deaths, from each, will shew the Extent of the Practice, and assist in ascertaining the most healthy Situations.

It was imagined the general Description of the Diseases would be illustrated by a minute Account of some Cases selected from the Table; this we have accordingly given, and the Cases will be described in the Order observed in the History.

From the frequent Opportunities we had when in America, of examining the Nature and Cure of Dysentery, we were led to make some Alterations in the common Treatment of that Disease: A successful Practise approved the Alteration made, and this has been more firmly supported by the Trials we have given it in the West-Indies: We shall, however, only mention it in very general Terms, reserving a particular Explanation to a future Period.

We were naturally led into an Enquiry on the Means of preventing Relapses, from their very frequent Occurrence, from observing the different States of Health of Inhabitants and Soldiers, on different Parts of the Island, and from the Effects of a Change of Air.

In the Course of these Observations, it will be easily perceived; that they are chiefly drawn from Cases of Men, under the immediate Direction of Capt. Williamson, commanding his Majesty's Royal Artillery, in the West-Indies: The generous Attention he bestowed on them in the Hour of Disease, and the Readiness he always displayed, to coincide with every reasonable Request for their Assistance, have not failed to endear his Character to the Soldier, and to constitute him one of the first Ornaments of Humanity.

Through the Whole, we were very much indebted to the late experienced, generous, and humane Doctor Bruce; he was Physician to the Army, and if a constant Attendance to Duty, a steady Adherence to
Benevolence

INTRODUCTION.

v

Benevolence and Justice in the Performance of it, are the Marks of a valuable public Character, to him that Appellation justly belonged, and on him it was universally conferred; and if sincere Feelings of Regret, in every Department of the Army, and by every Individual who had the most distant Knowledge of him, are Proofs of Respect, Esteem, and Attachment, he had an extensive Share of them; I know there is no Person who recollects his Name, but will be struck by his Virtues, and many with me will drop a Tear of Gratitude.

*“ Mon deuil me plait, et dois toujours me plaire,
Il me tient lieu de celui que je pleurs.”*





P A R T I.

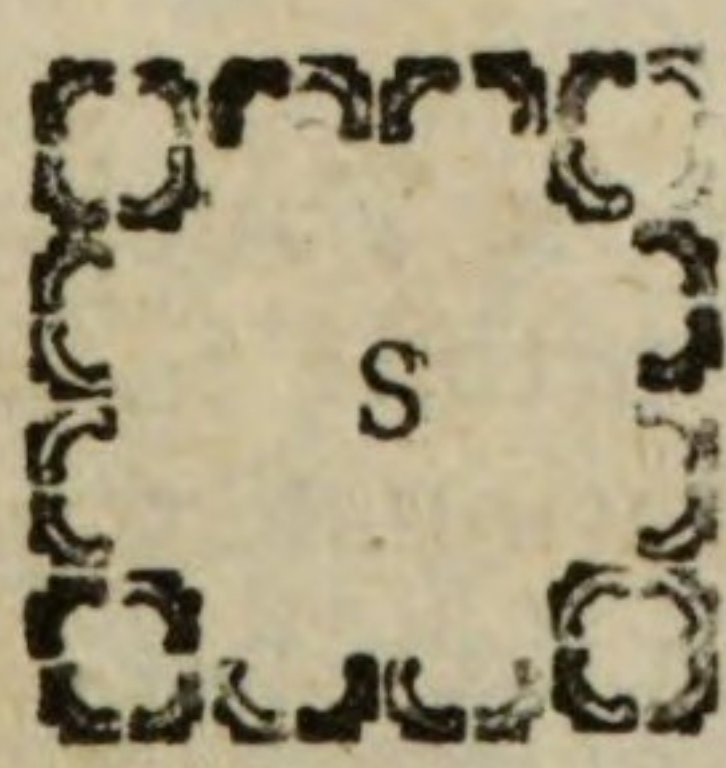
Observations calculated to assist in ascertaining the Causes, and in explaining the Treatment of the Diseases, which appeared in the Army on St. Lucia, in December, 1778; January, February, March, April, and May, 1779.

C H A P. I.

A Description of different Places of St. Lucia, which were or may be occasionally occupied by the Army; with a general Account of the Island premised.

S E C T. I.

Of St. Lucia in general.

T. LUCIA is situated betwixt Martinico and St. Vincent, and from it both are discernible; it is generally reckoned in North Latitude 13d. 55m. and West Longitude 60d. 04m.

This Island represents a Portion of Ground, on which are every where placed perfect and imperfect Cones of irregular Heights, leaving in some Parts a considerable Flat, in many others deep Vallies, covered with a stagnating Water, impenetrable Woods and poisonous Shrubs, and generally the Resort of noxious Animals. The Sea Shore on both Sides of the Island is

is high, very rugged, and full of Bays of various Extents; the Windward Side has its Shore particularly bold and irregular, and in many Parts of it a high white rugged Beach.

The Seasons are much the same here as in the other Caribbee Islands; the rainy Periods continue longer, and appear in different Times. We were told, that in December, January, and February, there was generally Rain, but not so constant or of so long a Continuance as in 78 and 79. The particular rainy Season begins about the End of June, and continues several Months. In the Winter the Mornings and Evenings are chilly; Summer Months hot and sultry; May and June were exceeding hot and disagreeable, especially when there was little Wind, (vide Register) and in these Months Insects of the most troublesome Kind overrun every Place.

The Winds generally blow from the N. E. to the S. E. seldom varying to the Westward. About the latter End of July, but more certainly in August and September, the Winds blow very severe, sometimes forming a Hurricane.

In the Evening of the 5th of March, a slight Touch of an Earthquake was felt, both on Morne Fortune and in the Carenage, but it was of no Continuance: These Tremblings of the Earth are now and then perceptible, but never of any Severity or Duration.

The Soil of this Island, on the dry Flats of Land, and on the Brink of Hills, is in general composed of a good Layer of black Mould, Clay, and Sand. About Gros Islet, particularly to Windward of it, the Soil is sandy, having but a very slight Surface of black Earth. Several Gentlemen well acquainted with the
Soil

Soil of our other Islands, assured me that the Soil of St. Lucia was in general the most rich and fertile; it produces Cocoa, Coffee, Cotton, and Sugar-Cane, Vegetables and Fruit in Plenty; they have Cattle, Poultry, and Fish in Abundance, but from the present Behavior of the Natives and Residents, the Soldier and Stranger finds the Reverse: These People consist of Europeans, Creoles, Negroes, and a few Families of Caribbees; the two first Classes are French, and of that Extraction, except two or three Individuals; the French Manners therefore prevail. Very few of them, even Creoles, on the Leeward Side of the Island arrive at any Age; they live regular, and are in general cleanly; Fish and Vegetables, with a little Wine, is their principal Diet, especially those who have their Residence in the Bays; they at Times, however, eat their Mutton, and those in the interior Parts of the Island subsist chiefly on Vegetables and Fricassees. The French are remarkable for their Indolence, leaving every Thing to be done by their female Mulatto, of whom they are particularly fond; you find them either a-sleep, lolling under a Tamarind-Tree, smoking, or engaged in the most trifling Conversation.

St. Lucia is not destitute of medical Productions; among the chief of which are, Simarouba, Zinziber, Cassia Fistularis, and the Castor-Nut; Ipecacuan, Squills, Jallap, Sarsaparilla, and even Bark, are said to be found here. We look forward with an anxious Hope to the present Physician of the Hospital, whose known Abilities and Industry in this; as well as in every other Part of his Profession, have fully enabled him to favor the World with satisfactory and important Accounts, of every medical Produce which can possibly be met with in any of the Caribbee Islands.

S E C T.

B.

S E C T. II.

Of Morne Fortune.

MORNE FORTUNE is a high Hill, of a steep Ascent, an extensive Base, and a flat Top; it gradually arises on one Side from the Bottom of the Carenage-Bay, and from Cul de Sac on the other; it is situated to Leeward of the Island, having higher Hills than itself to Windward. The Sides of this Hill were covered with thick, and (except a narrow Path on one Side, and a paved Way on the other) almost impenetrable Woods; these, however, became more clear, but not near so much as necessary; the Paths were widened, and the Ascent made less difficult. The Top or Summit of this Hill is perfectly free of Trees or Shrubs, and is of considerable Extent; on it the Governor's House, a Building for Barracks, and an Hospital were erected, and these were found in tolerable good Order; this Building was entirely converted into the latter Purpose, the Rooms are large and well adapted, every Convenience suitable, but the Situation of it is by no Means proper; it is fixed towards the Leeward, or Cul de Sac Side of the Hill, and in the most hollow Part of the Whole, with a Rising to Windward of it, which nearly covers one Half of the Height of that Side of the Edifice.

On different Parts of the Top of this Hill Soldiers formed to themselves Huts of Reeds, and thatched them with a long Grass found in the Vallies. The heavy Rains soon penetrated these loose Buildings, and the Soldier, after being exposed to Fatigue in the Sun, or to long Watching in the Night, was under the Necessity

Necessity of accepting the Refreshment a wet and cold Habitation afforded: The greatest Number of these Huts were raised on the Eastern Part of the Summit of the Hill, which we imagine to be one of the best Spots for that Purpose, being partly to Windward, and receiving an Air less intercepted by noxious Woods.

S E C T. III.

Of Grand Cul de Sac.

GRAND CUL DE SAC is a large Bay, of about one Mile distance from the Top of the Morne, and to the S. W. of it. It is surrounded on each Side with an irregular Chain of Hills, and those beyond the Bottom of the Bay are more particularly covered with Wood, and have their Tops in the Clouds.

There is a Flat at the Bottom of this Bay, in the Middle of which a River runs in a serpentine Direction from the Basis of the Hills, and terminates in the Bay. This River is narrow, of some Depth, and over its Edges hang a Number of Trees and Shrubs whose Roots are covered with Slime. The North Side of the River, or North Division of the Flat, is covered with Wood, which extend and run along the Beach; the Soil among the Trees and Shrubs is moist, and of a slimy and clay Appearance; the other Division of the Flat has several Pools of a dark coloured Water, covered with a greenish Scurf, and on the Beach are placed a few despicable Huts, the Habitation of Fishermen.

The south Side of Cul de Sac is high, and towards the Bay clear of Wood; it is exactly in the Direction of the Winds which pass over those Parts we have just described.

The North Side of Cul de Sac is rather higher than the South; it is not in the Direction of the Winds which pass from the Bottom of the Bay, being rather to Windward of it, but this Side has the Air which passes thro' and over the neighbouring Woods.

At the Sea Extremity of the North Side of Cul de Sac is a low Situation, on which a temporary Battery was formed; a constant Dampness or moist Earth distinguished the Place, and it was subject to a Rush of Air, from a kind of Valley, and a marshy Ground nearly to Windward of it.

S E C T. IV.

Of the Carenage.

CARENAGE-TOWN is a small Place, formed at the Bottom of the Bay from whence it has its Name, consisting of a few insignificant Houses, but not irregularly disposed, the Streets run in the Disposition of the Town, which has the exact Figure of a Cross; the frequent Rains overflowed the Streets, and you always met with a stagnating Puddle.

This Place is situated on a flat Piece of Ground, is more to Windward and more to the Northward than Cul de Sac, and is immediately at the Bottom of the Morne on its North Side; it is surrounded by Hills, and on the Windward Side of it is an extensive bare Marsh, which gives its unsalutary Effects with every Breeze of Wind to the Inhabitants; and on the Leeward Side of the Town a River runs, from a good Way back in the Country, and terminates in the Bay. The Hills to Windward form a Ridge, at the Back of which are higher Hills covered with thick Woods, whose
Bottoms

Bottoms make Vales, where are Pools of stagnating Water, and marshy Ground.

The North Side of the Carenage-Bay is formed by a Kind of Peninsula, which is almost seperated from the Island by a narrow Creek running from the Bay; this is a high Neck of Land, termed Morne Vigie, it is but little covered with Wood, and not much in the Direction of Breezes from the Island.

The South Side of the Bay is a high Hill, gradually declining from the Bottom of the Bay, until it terminates in a Flat at its Extremity; the whole is in the Direction of the Marsh and stagnating Water of the Town. At the uttermost Point of this Side of the Bay stands a Rock of a circular Figure, of some Height, and nearly perpendicular; it is seperated from the Land by some low Rocks covered with Sand; on it are placed Guns, and a small Hut for the Accommodation of a few Men; it receives an Air pure and untainted, seldom passing over any Part of the Island.

Carenage-Bay is narrow and long, and the greatest Part of it in the Direction of the Wind passing over the Land; a clear and wholesome Air can only be claimed in that Part of it, betwixt the Vigie and Rock Battery, which form the Mouth of the Bay.

From the particular make of this Bay, and the Disposition of the surrounding Hills, it never fails of having a large Proportion of the Rain which falls in this Part of the Island.

S E C T. V.

Of Gros Islet.

GROS ISLET is a capacious Bay, of considerable Width and Length; it is formed by an Isle on the North Side, by St. Lucia on the East and South, and is situated at the Northern Extremity of the Island.

On the Bottom of this Bay are a Number of Houses similar to those in Carenage; Marshes, stagnating Water, and Woods, are but trifling here in Comparison with some of the other Places we have mentioned. The Country around is pretty clear, and the Air which regales the Inhabitants passes over but a small Part of the Island.

The Isle which forms the North Side of the Bay, is known by the Name of Pigeon Island; it is very high and steep, and any Appearance of Flat is on the Windward Side: The Navy have Sick on this Part, Huts and Tents being erected for the Purpose.

The Air circulating in this Bay receives little or no Impression from the Land; the Situation here is more cool and agreeable on board of Ship than in the Carenage.

S E C T. VI.

Of Souffrir and to Windward of it.

SOUFFRIR is a small Town resembling those described, situated at the Bottom of a Bay towards the

the Leeward Extremity of the Island; like Carenage, it is surrounded by Hills covered with Trees, but here the Declivities of the Hills, and every Part capable of Produce are cultivated, and afford good Sugar-Cane. This Place has its Marshes, but not so extensive, or so much to Windward as those about Carenage.

The Extremity of the South Side of Souffrir Bay runs into two steep Hills of a conical Figure, and are nearly perpendicular: They are reckoned the highest on the Island, and are known by the Name of the Sugar Loaf Hills; from their Height and Straitness it is impossible to ascend them; we were told it was once attempted by two Negroes, but they never returned. They are covered with Trees and Shrubs, and are the Shelter of Goats, several of whom sometimes descend, and are shot by the Natives.

After you pass the Hills to Windward of Souffrir, a fine clear and level Country presents itself; from the back of the Sugar Loaf Hills, and all along the Sea Coast, to the Distance we suppose from fifteen to twenty Miles, this Flat or Level extends: It is all cultivated and divided into rich Estates, affording Sugar Cane equal to any in our Islands. This beautiful Spot is intersected by many Rivers of very clear Water, and these are conducted by Art to the Purpose of Sugar-making. The rains in this Part are less frequent than on any other Part of the Island; however, they have often a Proportion more than sufficient. The Wind here blows from the Sea, or nearly so.

We cannot finish this Description without taking Notice of a Volcano, in the Neighbourhood of Souffrir. You pass over one or two small Hills to the Southward of the Town, and before any Mark of the Place is perceived, you are sensible of the Smell of Sulphur. The first

first Thing you discern is a Rivulet of a black running Water, sending forth Steams as if near boiling; from the Prospect of this you soon open on the Volcano, which appears in a Hollow, surrounded close on every Side by Hills; there are only two Openings, the one we entered, and another almost opposite to it on the North Side; in the Hollow there are many Pits of a black and thick boiling Matter, which seems to work with great Force; Lava is slowly thrown out, and in the Centre of the Hollow there is a large Mass of it forming a kind of Hill, this we ascended, but were soon obliged to return from the excessive Heat. The Lava is a Sulphur, mixed with a calcerous Earth and some saline Body. We found small Quantities of Alum in a perfect State. In the Opening at the North Side of the Hollow, there is a Rivulet of very good Water, on stirring the Bottom over which this Water runs, we were surprised with feeling it very hot, and on placing a tumbler filled with some of the Water close to the Bottom of the Rivulet, it soon became so hot as not to be touched. The Liquid which runs from the Pits is strongly impregnated with Sulphur, and resembles a good Deal the Preparation sold in the Shops, known by the Name of Aqua Sulphurata, or Gas Sulphuris. Before St. Lucia was in our Possession, two or three Vessels were loaded with the crude Sulphur of this Volcano, for the Use of America.

C H A P. II.

A Register of the Weather from the 14th of December, 1778, to the 31st of May, 1779, inclusive.

IN stating the Account of the Weather, we intend;
1. to mark the Month, 2. the rainy Days, 3. the
clear, 4. the cloudy, 5. the thick and foggy, 6. the
Degree and Direction of the Winds, and 7. add some
Remarks.

It will be necessary to premise an Explanation of some
Terms we shall have occasion to use. The frequent
Rain, is intended to denote short Showers frequently
repeated, with Intervals of clear or cloudy Sky; and,
by constant Rain, more frequent Showers, of longer
Duration, and of shorter, or little or no Intervals. We
would wish to give the Idea by clear, of a mild and
serene Atmosphere, with few or no Clouds, or in
other Words, pleasant Weather; thick, hazy or
foggy, and cloudy Weather, the Reverse. By mode-
rate Winds, we mean all the Degrees from calm to
light and gentle Breezes; strong, the degree upwards
to the severest Winds we had, which came in Squalls,
and were often very severe, but of no Continuance;
they generally accompanied Showers, or rather ushered
them in, and went off with the Rain.

DECEMBER, 1778.

Rainy Days.

(a) Frequent Rain

16, 17, 18, 19, 20, 21, 22,
27, 28, 29.

C

(b) Con-

(b) Constant Rain, 26, 30.
 Clear Days, 14, 23, 24, 25, 31.
 Cloudy Days,
 Thick and foggy days,
 Winds.

1. Direction,

Varying from the North East to the South East Points; but generally East North East, seldom to the Southward.

2. Degree.

(a) Moderate,

From the 14 to the 29, inclusive, and the 31.

(b) Strong,

30.

REMARKS. The Evenings of this Month were cold and chilly; the Mornings of the clear Days, and Days of frequent Rain, were in general pleasant and agreeable; but in those of constant Rain, a different Aspect was exhibited.

JANUARY, 1779.

Rainy Days.

(a) Frequent Rain,

1, 2, 13, 21 to 29, inclusive, and 31.

(b) Constant Rain,

4, 6, 7, 14, 15.

Clear Days,

2, 5, 8, 9, 12, 18, 19, 27.

Cloudy Days,

10, 11, 17, 20, 30.

Thick and foggy Days.

Winds.

1 Direction.

Nearly the same as in last Month, rather more to the Southward.

2 Degree.

(a) Moderate,

1 to 5, 8 to 11, 13 to 20, 22, 26, 27, 30.

(b) Strong,

6, 7, 12, 14, 21, 23, 28, 29, 31.

REMARKS. The 7th of this Month is marked constant

constant Rain, but it was only for the first twelve Hours of the Day. In the cloudy Days the Weather was close and sultry; Evenings and Mornings, particularly after Rain, disagreeably chilly and cold. The clear Days was pleasant and agreeable in the Shade.

F E B R U A R Y.

Rainy Days.

(a) Frequent Rain, 3, 8 to 12, 23, 27, 28.

(b) Constant Rain, 22, 25.

Clear Days, 4, 7, 13, 15 to 20, 26.

Cloudy Days, 1, 2, 5, 6, 14, 21, 24.

Thick and foggy Days.

Winds.

1 Direction, To the Northward of East.

2 Degree.

(a) Moderate, 3 to 7, 13 to 17, 19, 20, 21, 25.

(b) Strong, 1, 2, 8 to 12, 18, 22, 23, 24, 26, 27, 28.

REMARKS. The Wind blowing so strong, and so constantly to the Northward in this Month, only two Days to the Southward of East---the 22 and 28---and having fewer rainy Days than in the last Months, the Weather was more equally cool and pleasant. The 22 Day is marked constant Rain, but it was only for eleven Hours.

M A R C H.

Rainy Days.

(a) Frequent Rain, 1, 8, 19, 20, 21, 28, 30.

(b) Constant Rain,

Clear Days, 3 to 7, 10, 12, 13, 15 to 18, 23 to 26, 29.

Thick and foggy Days, 9, 14, 19, 21.---The two first unaccompanied with Rain, the latter frequent Showers.

Winds.

1 Direction,

To the Northward of East.

2 Degree.

(a) Moderate,

2, 4 to 10, 16 to 25.--This last Day was a perfect Calm.

(b) Strong,

1, 3, 11 to 15, to 26 to 31.

REMARKS. This Month was in general cool and agreeable. Tenth Day the Morning and Forenoon calm, Afternoon the Wind was strong, and the Evening was attended with Thunder and Lightening. The Wind only varied from the Northward the 5 and 16; and the 11, varied from the Eastward to the Westward of North.

A P R I L.

Rainy Days.

(a) Frequent Rain,

4, 5, 9, 11, 12, 13, 22, 29, 30.

(b) Constant Rain,

Clear Days,

2, 3, 7, 16, 17, 19 to 27.

Cloudy Days,

1, 6, 8, 10, 14, 15, 18, 28.

Thick and foggy Days,

Winds.

1 Direction,

To the Northward of East.

2 Degree.

(a) Moderate,

1, 2, 5, 9, 10, 12 to 17, 20, 21, 22, 25, 26, 27, 30.

(b) Strong,

3, 4, 6, 7, 8, 18, 18, 23, 24, 28, 29.

REMARKS. The Weather was more hot and sultry in this than last Month. The Wind only varied one Day to the Southward of East---the 13. The frequent rainy Days in this and the succeeding Months, generally began in the Afternoon, and often continued thro' the Night; the Mornings of these Days were clear, tho' there was for the most Part a Shower early in the Morning.

MAY

M A Y.

Rainy Days.

(a) Frequent Rain, 3, 10, 12, 14, 16, 30.

(b) Constant Rain, 2, 31.

Clear Days, 7, 8, 9, 15, 17 to 25.

Cloudy Days, 1, 4, 5, 6, 13, 22, 23, 26 to 29.

Thick and foggy Days,

Winds.

1 Direction, To the Northward of East.

2 Degree.

(a) Moderate, 2, 3, 4, 7, 8, 15, 17 to 21,
24 to 27.(b) Strong, 1, 5, 6, 9 to 14, 16, 22, 23,
28 to 31.

REMARKS. The Weather in this Month, notwithstanding the frequent Winds, was more hot and sultry than the last, all Kinds of Insects were more numerous and troublesome, Second Day marked constant Rain was calm. The Wind was two Days to the Southward of East---the 3 and 26.

GENERAL REMARKS.

I. The Wind in the Latitude of St. Lucia, generally decreases towards Evening, and encreases or renews its Strength in the Morning, an Hour or two after Sun rising. I have heard, however, frequent Squalls in the Night, which were always accompanied by Rain.

II. In the clear Days the Wind is generally more to the Northward than in the other Days, in the cloudy the Wind is more to the Southward, and in the rainy Days the Wind inclines to the Eastward.

C H A P. III.

A Table containing a List of the Diseases, and an Account of the Number of Men in Health on different Situations to be described.

THIS Table is formed of two Parts : The first Part marks the Diseases, and is divided into nine Columns. First Column specifies the Number of Sick from each different Post, by 1, 2, 3, &c. the mark $\ominus$, denote those who have relapsed, or who have been formerly affected by Disease. Second, Men's Names. Third, Marks the Disease, and in tracing this Column with the first, you will find the Frequency of Relapse, and the Alterations which may have happened in the second or third Appearance of the Disease in the same Patient. Fourth, Points out the Situations of the Island, on which the Men were fixed; in this Column of the Table frequent Recourse must be had to the Description of each of the Places mentioned: It is necessary here to observe, that the Patients marked from the Ridge of Hills to Windward of Carenage, were for two or three Weeks at our first Landing, on the Vigie; and that towards the End of March they removed from the Hills and again occupied that Post. Fifth and Sixth Columns, give the Age and Colour of the Hair; it was thought necessary to particularize them; many determine much from the Age, and the Idea of Temperament with many has Weight, to distinguish which, the Colour of the Hair we imagine to be the best general Characteristic. Seventh, Eighth, and Ninth

A

Part II in Continuation.

Diseases.	The situations of the and on which the en were fixed.	Age.	Colour of the hair.	When admitted	When discharged	When died.
Ditto	South side Caren. bay.	25	black	27 jan	17 feb.	
Quotidian		25	fair	31	12	
Ditto		26	dark	ib.	28	
Ditto		ib.	black	ib.	3	
Ditto		22	do	1 feb.		7 apr.
Ditto		ib.	dark	5		
Remittent		23	do	ib.	17	15 feb
Ditto		22	fair	12	22	
Quotidian		ib.	black	ib.	10.	
Ditto		21	fair	25	8 mar.	
Ditto		22	do	5 mar	22	
Dysentery		24	black	17	28	
Quotidian		28	do	21	15 apr.	
Remittent		20	dark	29		
Quotidian		26	do	12	29	
Remittent		24	black	14 apr.	14	
Tertian		ib.	dark	21	30	
Ditto				24 feb.	8 mar.	
Remittent				25	4	
Diarrhoea				1 mar.	25	
Ditto				8	21	

Ninth Columns, Mark the periods of Admission, Discharge, and Death, from which you ascertain the Duration of the Disease as favorable or unfavorable.

The Patients who are neither marked as discharged or dead, were removed from the Island.

The second Part of the Table is divided into Five Columns: First Column, Marks the Situation of the Island on which the Men were placed. Second, Gives the Number of Men in Health originally on each of these Situations. Third, Specifies the Number of Sick. Fourth, The Number of Relapses. Fifth the Number which died.

By an attentive Review of both Parts of this Table, and the different States of Health of the Inhabitants and Natives, we may with some Degree of Certainty point out the healthy and unhealthy Situations,

C H A P IV.

Of the Situations of the Island on which the Men specified in the Table were fixed; and an Endeavor to determine the most healthful.

S E C T. I.

Of the Situations on which the Men
were fixed.

THE first Landing of the Army was in Cul de Sac, on the South Side of the Bay; and forty Artillery Men with four Field Pieces landed towards the North Side: They had to drag their Guns up very steep Hills, and with all the Quickness they were Masters of, in Order to join that Part of the Army to which they were detached; next Day those Men took their Stations on the Vigie. The Remainder of the Artillery were disembarked.

The whole Army now occupied the South and North Sides of Cul de Sac, Morne Fortune, and both Sides of Carenage-Bay. Those who were on the Vigie lay exposed to severe Rains, and had no Change of Linen for upwards of ten Days: Indeed, the Army in general was exposed to bad Weather, but having a Communion with the Transports, which those on the Vigie were deprived of, they did not so particularly feel it.

About the Middle of January the Army was much in the same Situation. The Grenadiers, Light Infantry,
fifth

Part I. Of the MOST HEALTHY SITUATIONS. 19

Fifth Regiment, and the forty Artillery who landed the first Night, and were altogether on the Vigie, changed Ground and took Possession of the Ridge of Hills to Windward of Carenage. At this Time we had Artillery as expressed in the Table; on both Sides of Cul de Sac, on Morne Fortune, and on the South Side of Carenage-Bay; and from the End of April, and during May, the Artillery were placed on the North Side of Cul de Sac, on Morne Fortune, and on both Sides of Carenage Bay. The Men originally on the South Side of Cul de Sac were removed to the Morne; and those in the last Months on the North Side of Carenage or Vigie, were the forty Men formerly mentioned.

Soon after our first Landing we had some Provision and Artillery Tents erected on the Beach, at the Bottom of Cul de Sac Bay.

We here remark, that when the Men changed Ground from the Vigie, to the Hills to Windward of Carenage, and when they returned again to their first Position, they were under the Necessity of erecting Huts every Change they made.

S E C T. II.

Of the most healthy Situations.

IT is universally admitted that every Country has its healthy and unhealthy Spots; to ascertain which is a Matter of Importance to Strangers, and even to Natives. Soldiers who are liable to be removed from one Country to another, and who are subject to every Inconvenience of a Change, ought, as far as the Circumstances of War will admit, to be placed on those Parts of an Island or Country, which, from Appearance,
D and

and the Healthiness of its Inhabitants, are apparently the most salutary.

When active Operations are carrying on, either in Defence or Attack, it is impossible to attend to the healthy or sickly State of any Place, every Consideration giving Way to Security or Success; but the Moment we are free from Danger, the Health of the Army becomes the principal Object; and the first Thing to be attended to, is the particular Parts on which Soldiers are to be fixed.

St. Lucia, like other Islands, has Situations in which a remarkable Difference of Health and Sickness is evident; to ascertain the healthy Situations, we shall take a View of the State of the Soldiers and Inhabitants on those Parts we have described.

Of the SOLDIERS.

On Morne Fortune the Troops were in general healthy; from eighty-six Artillery Men on this Situation, we had only seventeen sick, and the most of these had been on Service from the Morne: The Death which happened here, was a Case originally on the South Side Cul de Sac. The thirty-fifth Regiment, who were placed on the South Side of Cul de Sac, had before the Middle of January more than fifty sick with Fever, and many of them dangerous; from seventeen Artillery on this Situation, we had sixteen, during this and the succeeding Month, in the Hospital, with a bad remitting Fever. Those who were in the Tents at the Bottom of the Bay, had intermittent Attacks, and one of our Gentlemen died of a Fever on the ninth Day, with putrid Symptoms.

The Artillery and Troops on the high Ground North Side Cul de Sac were sickly, but not so much as on the
South

Part I. Of the MOST HEALTHY SITUATIONS. 21

South Side; from thirteen men we had six sick, and of these two died. The Men at the Low Battery on the same Side of Cul de Sac, were more unhealthy; we had every Man sick, and lost two.

In Carenage Town, the four men placed there were all sick.

From the Vigie, or North Side of Carenage Bay, we had at first no Sick; but after they changed Ground, to the high Hills to Windward of the Town, in the Months of February and March, we had many sick; several Officers of the Army died in six or seven Days Illness, and Numbers of Men. The fifth Regiment, who changed Ground again to the Vigie, their original Situation, and our Detachment of Artillery, continued sickly; but in the End, the Severity of their Diseases abated, while those of other Parts encreased.

On the South Side of Carenage Bay, two-thirds of our Men were sick, and here we lost the greatest Number. The Rock Battery of seven Men had only three sick, and these were slight Cases.

Upon the Whole, the worst Cases were from the South Side, and the Low Battery on the North Side of Cul de Sac, Carenage Town, the Ridge of Hills to Windward of it, and the South Side of the Bay: On the contrary, the fewest and slightest Cases were from Morne Fortune, high Ground North Side Cul de Sac, Vigie, and the Rock Battery.

Of the INHABITANTS.

At Carenage Town the People are short lived, have annual Attacks of Fever, yellow and meagre Countenances, small legs, except when in OEdematous; in a Word, their Appearance is as if they were worn out by

Disease. At Gros Islet the Inhabitants live longer, are not so subject to Disease, at least not of the same Degree or Duration; they are more full in the Face and more hearty.

At Souffrir the Inhabitants have chearful Countenances, and are nearly in a State of Health with those of Gros Islet; but this may be attributed to a better Diet rather than Situation. On the extensive Plain to Windward of this Place very few Diseases appear, and they are mostly Intermittents; the Countenance here of the Women, of the Children, and even of the Men, have some Degree of Resemblance to that of the European; the Female has the Red on her Cheek, and the Child has all the Marks of Health.

From this View of the State of Soldiers and Inhabitants on different Situations, we imagine the following particular Parts of the Island, in the State we have described them, are the most favorable for an European Constitution: We shall place them according to their superior Degree of Healthiness;

1. Windward of Souffrir.
2. Morne Fortune.
3. Vigie and Rock Battery.
4. Situations about Gros Islet.

Pigeon Island particularly.

In general, we believe those who reside in the Windward Parts of the Island, and those Parts not exposed to the noxious Effluvia of Marshes and Woods, are in the most salutary Places of Abode.



P A R T II.

Observations on the Diseases which appeared in the Army on St. Lucia, in December, 1778; January, February, March, April and May, 1779.

C H A P. I.

Of the History of the Diseases which appeared in the Months specified.

WE divide the Diseases into intermitting and remitting Fevers, and Dysentery: We shall narrate the Manner of Attack, and describe the Symptoms of each, then subjoin some general Remarks.

S E C T. I.

Of the History of the Intermittent.

THE Intermittent Fever appeared in its various Types; Quotidian, Tertian, and Quartan. The Quotidian was the most frequent, and we had only one or two Cases of the Quartan.

Patients were attacked with Langour, Prostration of Strength, and Shivering followed by heat, and an universal Sweat followed the Paroxysm. The shivering went off as the Heat encreased, but the Languor and Prostration of Strength continued until a perfect Solution of the Fever took Place, and even in the Apyrexia or Interval of Attack, some Degree of these were observable, particularly in the Quotidian.

A Yellowness of the Skin, Costiveness, and a high coloured Urine attended, and these were more evident in the Quotidian than Tertian.

The Paroxysms were in general perfect; but of different Durations, especially in the Quotidian, which was often a Prelude to the Remittent Fever, and then the Attacks became irregular and imperfect.

S E C T. II.

Of the History of the Remittent.

THE Remittent Fever was sometimes the Consequence of an Intermittent, particularly if neglected on its first Attack; but we generally found this Fever making its Appearance in a different Manner, and in its Turn it often run into the Intermittent.

Languor, Prostration of Strength, Chilliness, livid Colour of the Lips, a particular dejected Look, and Nausea, were the first Marks of this Disease; and these were soon followed by Anxiety, Head-Ach, Pain of the Back and Loins, Heat, Thirst, often a Vomiting, and an Encrease of the Nausea, Languor, and Prostration of Strength.

After the first Remission, which generally happened towards Morning, all the proceeding Symptoms encreased, with the Addition of a foul Tongue, a Yellowness of the Eyes, and in some Cases an universal Tinge, Delirium, Urine in small Quantities and very high coloured, imparting an offensive Smell, often a Difficulty in voiding it, which sometimes came to a perfect Stoppage.

The

The Pulse in the first States of this Fever was seldom encreased, or in any unnatural Feeling, but was considerably altered in the last mortal Stages of the Disease.

A Remission was perceptible from an Abatement of the Severity of Symptoms, a gentle Moisture on the Skin, a free Discharge of Urine, and a Diminution of the Yellowness.

A Comatose Disposition, remarkable Dejection, Coldness of the Skin, partial cold Sweats, Hiccup, involuntary Stools, Subfultus Tendinum, Loss of Speech, &c. were certain Signs of Danger.

An Eruption about the Mouth and Ears, with a Swelling of the upper Lip, either in this or the Intermittent, happening when the Fever was going off, was a certain Sign of Recovery; but if it appeared when dangerous Symptoms were present, it greatly assisted in the unfavorable Prognostic.

When Flies become numerous about a Patient's Bed in any Period of the Disease, and adhered to his Lips and Eyes, without his being sensible of their Attachment, a certain Mark of Danger was exhibited: Indeed, these Insects never made their Appearance in any Number, until Danger by other Signs was too apparent.

S E C T. III.

Of the History of the Dysentery.

THE Dysentery in its Attack, Progress, and Terminations, resembled that Disease as it appears in the Army in America, except more remarkably assuming the Form of the Intermittent and Remittent. A Fever
often

often precedes the proper Dysenteric Symptoms, and is always coeval with them tho' varying in its Degree of Severity.

When we left St. Lucia very few Dysenteries had made their Appearance, the common Season not being advanced.

S E C T. IV.

General Continuation of the History.

UNTIL the latter End of April the Fevers for the most Part terminated in Death about the seventh Day, and when the Termination was favorable, run on to about the fourteenth, tho' we had some Cases which continued to the twentieth. After this Period, the fatal Termination was from the third to the seventh Day; and those who died on the third went off suddenly---were at once seized with a convulsive Motion, (vide Case vi.) Loss of Speech, cold Extremities, burning Skin which assumed in many Places a dark livid Color, Breath foetid, in some a Foaming at the Mouth, and they generally finished Existence half an Hour or more after the convulsive Attack, which always ceased some Minutes before Death.

We cannot be very exact about the Length or Days of the Disease; some Patients coming in to us with all the Marks of Fever; and respecting its Continuance, we could not trust to their Report so much as to found an Observation.

In May, the Cases of Fever which terminated fatally on the seventh, were attended with a Looseness, and twenty-four Hours before Death the Stools were very
foetid,

foetid, and run involuntary. In most of the fatal Cases which terminated on the seventh, a Hiccup appeared about the fifth Day; this however occurred in Cases which ended favorably, but in these Cases the Power of Medicine was more discernible. The Cases which terminated fatally on the third, had no yellow Appearance on their Skin; but those on the seventh had a deep Tinge all over their Surface. In several fatal Cases where Blisters were applied, the Discharge was black and foetid, this particularly happened in the Month of May; earlier the Discharge was less foetid and yellow. In the later Months, the Appearance of Putrefaction, both before and after Death, was more rapid.

We had Cases which recovered who were of a deep yellow Tinge; one was peculiar, (vide Case V.) he turned yellow of a sudden, and in thirty-six Hours went off by some loose Stools, and a large discharge of thick and high-coloured Urine. We had four Cases of Fever which run on from the fourteenth to the twentieth Day, and continued afterwards in the Hospital some Months; one of them died, (vide Case IV.) and three recovered.

In general, the Cases of a fatal Termination had very indistinct Remissions; those who died on the third, had no Marks that we could discern of a Remission at all; but the Cases which recovered had sensible Remissions, tho' some at the Beginning assumed the Appearance of a continued Fever.

In the early Months, Pectoral Complaints followed the tedious Fever; and in the later Months, these became more troublesome, and were often conjoined with a dropical Disposition; some had a Diarrhœa, others a Costiveness and a Looseness alternately; a weak State of

the Stomach with Flatulence was likewise an Attendant; sometimes a Swelling of the Face, Feet, and Hands, and even of the whole Body took Place, more especially in those who had Quotidians for a Length of Time---Any of these Circumstances made the Recovery very tedious and uncertain. In the early Months we seldom met with Relapses; but in the later Months they were frequent, and the Recovery was always slow, being generally attended with some of the preceding Symptoms.

CHAP.

C H A P. III.

Of the Causes of the Diseases described.

THE Diseases of the West-Indies are generally supposed to arise from Heat, Cold, Moisture, and the Effluvia or Vapor of Marshes; a Combination of which can often be traced, and indeed are always together in different Degrees, as Causes of every Disease with which Europeans are affected. The Operation of these Causes are induced and rendered more active in their Effects, by Circumstances of Constitution, Living, and Employment.

We have formerly observed that Part of the Artillery, the Grenadiers, Light Infantry, and fifth Regiment, were on their first Landing, and for some Time after, exposed to Fatigue, constant Rain, Changes from Heat to cold, and they had no proper Nourishment. When these Troops removed from the Vigie to the Ridge of Hills to Windward of Carenage, they became very sickly and had many Deaths; but in this Situation, to the former Causes of Disease were added the humid Vapor from extensive Woods, and the Effluvia of Marshes to Windward of them: On Changing Ground again to the Vigie they became less sickly, and their Diseases proved less fatal.

The Men who were placed in the Direction of the Marshes at Carenage and Cul de Sac were most unhealthy, and had those Diseases which terminated so quickly in Death; while those Men who were on

Morne Fortune and Rock Battery were more healthy, and the Diseases of a milder Aspect and less mortal.

From these Circumstances we must suppose, that altho' Heat, Cold, and Moisture, in certain Degrees and Combinations may produce Diseases of considerable Severity, they were not the common Causes of the Diseases we have described; but, that they were chiefly the Consequence of Marsh Effluvia: It is evident, however, that the former Causes operated so far as to induce and facilitate the Action of these Effluvia, and to make them more universal and active in their Effects.

The Duties of Fatigue to which Soldiers in every Part of the Army were necessitated to comply with, aided in producing those Diseases with which they were affected. They had their own Huts to erect, and when finished were not a Shelter from the Rain; beside this work, they were employed in raising Batteries, in carrying up Provisions to the Morne, in making and levelling a Road from it to the Carenage, and in short, they were subjected to every Species of hard Labour; Mornings and Evenings were not set a-part for Duties of this Kind, but the whole Day, even when the Sun was in his Meridian Violence. That these Things greatly assisted the natural Causes of the Island, was evident from those who were engaged in them, having the most frequent and speediest Deaths.

It has been generally remarked, that the Effluvia of Marshes are most active when the Water drains off and the Earth appears, which certainly was the Case in St. Lucia. The greatest Part of the regular Intermittents we had happened when the Rains were more frequent, and before the stagnating Pools discovered their Bottoms; and the most dangerous Remittents appeared when

when the Marshes had no Water, but a slimy Matter on their Surface.

Upon the whole, the different States and Combinations of the Causes we have enumerated, the Difference and Peculiarity of Constitution, and the Order observed in the Seasons, will explain the Appearance of the three general Diseases we have described.

CHAP.

C H A P. II.

Of the Treatment of the Diseases described.

S E C T. I.

Of the Treatment of the Intermittent.

Q U O T I D I A N.

IN the Absence of the Paroxysm we exhibited a Solution of Tartar Emetic, in small Quantities, and at short Intervals to excite vomiting; after this was effected we generally gave it in smaller Doses, in order to produce a few Stools, but this depended much upon the State of the Patient's Belly, and on the Continuance of the Disease. If he was apparently much weakened and had a loose Belly, which was sometimes the Case before they were sent to us, we deferred the Tartar Emetic, and gave a small Dose of Ipecacuan which seldom produced Stools.

We always found it necessary to give an Emetic at the Commencement of the Disease, and often during its Progress. After the Operation of the Emetic, we immediately gave the Bark, in as large Doses and in Substance as the Stomach could bear; this Method was prosecuted even tho' we had only Time to throw in one or two Doses of the Bark before the Period of the next Paroxysm; at the Termination of which we begun again, and for the most Part we put a Stop to the Disease in two or three Paroxysms from the first Exhibition of the Bark. If the Bark was not given in this Manner,
and

and in very large Doses, we often found our Fever assume a more dangerous Form---the Remittent.

T E R T I A N.

The Tertian was treated in the same Manner as the Quotidian, only we took more Time in clearing the Stomach and Bowels, and in attending to particular Symptoms.

In the Paroxysm of both, after the cold Stage began to disappear, we always gave a Combination of Tartar Emetic and Opium in Solution; Opium was given alone if the Stomach was very irritable, and to a careful Exhibition of these in this State of the Disease, we attribute the Success we met with; the Severity of Symptoms abated, the Duration of the Paroxysm shortened, and the Intermission made longer and more perfect, were the constant Effects of this Method; and we found them more certain if the Stomach permitted the Combination of Tartar Emetic.

The Diet of our Patients in the Presence of Fever, was thin Gruel, and towards its Termination was made grateful by the Addition of a little Wine; in the Intermission Broths, thick Gruel, and Wine in small Quantities, with Water or by itself were allowed; in the cold Stage Liquids were generally avoided; but on the Approach of the sweating Period free Dilution was recommended---as Lemonade, Toast and Water, Barley Water, &c.

S E C T. II.

Of the Treatment of the Remittent.

THIS Fever required the earliest Exhibition of Medicine; for whether it appeared as a distinct Disease immediately in its own Form, or as preceded by the Intermittent, it was always attended with Danger, and two or three Hours Delay proved fatal; but this more particularly happened in the first Case of the Disease. In the History we observed that many Cases terminated in Death three or four Days from the Attack, and in these, tho' the Remissions were scarce discernible, there was so much Resemblance in other Respects, as induced us to comprehend them under the same general Character---Remittent.

If the Remittent had been preceded by an Intermittent, where Evacuations was used and the Disease of some Continuance, we seldom found it necessary to repeat an Emetic or Laxative. When any of these Operations were wanted, the smallest Quantity of an Antimonial or Ipecacuan was given, and common Injections were used: Our chief Attention here was to procure a distinct Remission, or if possible an Intermission; the most effectual Means for this Purpose we found to be nauseating Doses of Tartar Emetic; and at the Time of the usual Exacerbation of Fever, an Opiate by itself, or combined with an Antimonial, according to the State of the Stomach, in the same Manner as after the cold Stage of an Intermittent. If the febrile Symptoms ran high before the Remission was expected, a large Blister applied to the Back, particularly if any Degree of Delirium was present, greatly assisted to bring about that desirable Event.

When

When a Remission was effected, we directly threw in Bark, in a Form we thought most eligible for the State of the Stomach, and in Quantities as it would bear; if the Interval allowed us to give only two or three Drachms, or even less; in the next Exacerbation the good Effects of it were evident, and more so in the succeeding Remission, which was longer and more perfect. In this Way we continued until we removed the Disease, or brought it into the Intermittent Form, and then we observed the Treatment as directed under that Disease. But if our Attempts failed, and we had the greatest Reason to dread the Termination, we continued the Bark in every State of the Disease, and added to it the Use of Snakeroot; if the Stomach could not retain the Bark, we gave a strong Infusion of Snake-root alone, and ordered Wine in Proportion to the State of the Disease. By this Method we have often altered the dangerous Appearance, and given a favorable Turn to the Disease.

If the Remittent Fever appeared in its own Form, and was not preceded by an Intermittent. we gave the Tartar Emetic in Doses to produce Vomiting and Purging, taking Care to encourage the latter, no farther than to procure an effectual Discharge of the Contents of the Intestines, and not to weaken the Patient. If the Exacerbation succeeded these Operations, we generally gave an Opiate, and some Time after re-assumed the Tartar Emetic in nauseating Doses, frequently encreasing the Quantity so as to produce a gentle Rejection of the Stomach, and then in every other Respect we proceeded as formerly directed; but here, as the Danger became sooner apparent, we were more anxious by every possible Means to throw in a proper Quantity of the Bark, and when it was rejected by the Mouth we attempted it in Glysters, but we seldom found the good Effects, as the Disease

in general in this State was beyond the Power of Medicine.

Towards the Termination of Fever, or in the last Stages of the Disease, we found when the Patient was much reduced the best Effects from Wine; when Bark was rejected, and every bad Appearance present, we have been sensible of Benefit from this valuable Article; but it was given from one to two Pints in the Course of twenty-four Hours, in small Doses, and at proper Intervals---We are convinced many by a proper Use of it have escaped Death: However, we are aware, that it has been imprudently used by a too early Exhibition, and by being given in too great Quantity. The Continuance of the Disease, the Degree of Weakness and Danger must regulate us; and we should have some Regard to the Proportion used by the Patient in a State of Health.

In every Stage of the Disease the Patient was allowed---weak Wine and Water---Gruel---acidulated Water---and Chamomile Tea: They generally preferred acidulated Water, but many were fond of the Chamomile Tea, or an Infusion of the Wood of the Simouraba. When they wished for Something more substantial---Panada---Sago---thick Gruel---and roasted Fruit were permitted them: For some Time after the Appearance of Recovery, they had no Animal Preparation except small Quantities of very thin Broth.

S E C T. III.

Of the Treatment of the Dysentery.

WE always began by an immediate Discharge from the Stomach and Bowels; to effect which we found

found a Solution of Tartar Emetic to be the best Medicine. However, if the Patient was much reduced, or had been two or three Days ill before we saw him, we generally preferred small Doses of Ipecacuan, and a weak Solution of Glauber or Cathartic Salt; after the Operation of these Medicines we gave an Opiate, which we often repeated in two Hours.

Next Morning we began giving a Combination of Tartar Emetic and Opium, sometimes in a solid, but oftener in a liquid Form; we have given to the Quantity of three or four Grains of Opium in this Way in the Course of the Day, and the general Consequences were large Stools; an Abatement of the Gripping and Tenesmus; and a Remission of the Febrile Symptoms: These good Effects were more certain, if the Medicine was given so as to excite Nausea, which we always attempted and endeavored to maintain.

At the Commencement of the Treatment we often used Fomentations to the lower Extremities and to the Abdomen, which we continued until a Remission of the Pain was effected. When the Gripping or Pain of the Belly was very severe, we have derived good Effects from the Application of volatile Liniment and Blisters.

When this Disease assumed the Intermittent Form, we treated it in the much the same Manner as that Disease.

As Astringents we have tried the different Preparations of---Earths---Infusions and Decoctions of Simarouba---and Bark; but we found Opium to be the best, assisted by Diet, Air, and Cleanliness.

We formerly observed in the Introduction, that we

meant to describe this Disease in very general Terms; to this Resolution we have certainly adhered, however, we shall on another Occasion have it in our Power, to give a particular Discussion of this Subject from Observations and Cases collected in America.

S E C T. IV.

Of the Treatment of particular Symptoms.

IT will be observed, that we have only mentioned the general Mode of Treatment, and have not particularised Symptoms which often make a material Variation in the Practice. We shall here briefly take Notice of several Appearances which were troublesome, often dangerous, and required the most delicate Attention: These are,

- (1) *VOMITING.*
- (2) *LOOSENESS.*
- (3) *COMATOSE DISPOSITION.*
- (4) *HICCUP.*

(1) *V O M I T I N G.*

Vomiting was very often met with in the Remittent Fever, and sometimes in the Quotidian. Beside preventing the Exhibition of Medicine, it was always accompanied with Pain, and an Encrease of every attending Symptom; and when it occurred after the Disease had been of some Continuance it was a constant Mark of Danger.

When Vomiting appeared at the Commencement of the Disease, it generally went off by encouraging it either with Chamomile Tea, or small Doses of an Antimonial

monial, or a few Grains of Ipecacuan. If Costiveness attended, a Stool was procured by Glysters. If this Symptom continued or appeared in a later Period of the Disease, with Pain in the Situation of the Stomach or Liver, a Blister applied the whole Extent of the Epigastric Region, was in general attended with very good Effect. This Application was assisted by the Use of saline Draughts given in the Act of Effervescence, or as Doctor Mackittrick observed, a Solution of an Alkali followed by some diluted vegetable Acid. We think that we have seen some Advantage from a small Quantity of Opium, abstaining for some Time after from Liquids. When Vomiting succeeded the Use of the Bark it was for a While omitted, or tried in a different Form; in Cases of this Kind, an Opiate given in a solid State, about an Hour or two before we again begun the Bark seldom failed to remove it; we have sometimes found it necessary to encourage this vomiting, a little before we gave the Opiate.

In those Cases of Quotidian or Remittent Fever which were attended with an irritable State of the Stomach; Emetics, either Ipecacuan or Antimonials, were given with the greatest Caution.

(2) *L O O S E N E S S.*

This Symptom either arose from a neglected State of the Belly at the Beginning of the Disease; or from a particular Weakness of the intestinal Canal; or from a Mortification of some Part of it; or from a general Dissolution (if we may use the Expression) of Fluids and Solids.

If Evacuation was neglected at the Beginning of the Disease, or the Belly allowed to be costive for some Days, a Looseness appeared and often became dangerous; if the Patient was not much weakened, it was cautiously encouraged by thin Drink; but if the Disease was too far

far advanced, and Danger threatened from its Continuance, we have found a free Use of Opiates combined with Bark to succeed better than any other Thing we tried: When a Looseness was spontaneous, it was always a Mark of Danger, and hurried us to throw in as much Bark as was possible, and here we allowed Wine with Spices.

(3) *COMATOSE DISPOSITION.*

A large Blister applied over the whole Scalp, immediately on the Appearance of the Comatose Disposition, has checked its Progress, and given a favorable Change to the Disease; at the same Time, if the Degree of Danger was great, another Blister was applied to the Back, or one to each Ankle; and internally we gave a Bolus of Camphire, from five to eight Grains, in a strong Infusion of Snakeroot, or in a thick Solution of Extract of Bark, every two or three Hours.--- This Method of Treatment was generally prosecuted in the last Stages of Fever, when Subfultus Tendinum, Delirium, and Hiccup were present, and tho' seldom, yet we could trace some Advantage.

(4) *HICCUP.*

We have tried the Effects of Musk in large Doses in Hiccup, but never observed any Benefit, and we have given it joined with Camphire with similar Success. When this Symptom appeared early, a gentle Emetic removed it, and when it was united to other Symptoms of Danger, the Bark was the only Medicine from which any good Effect was derived.

S E C T. V.

Of the Treatment of Appearances
the Effect of the Diseases described.

THE Appearances, or more justly the Diseases which often succeeded those we have pointed out, may be reduced to,

- (1) *PECTORAL COMPLAINTS.*
- (2) *HYPOCHONDRIAC AFFECTION.*
- (3) *ABDOMINAL SWELLINGS.*
- (4) *OEDEMATOUS SWELLINGS IN THE LOWER EXTREMITIES.*
- (5) *A WEAK STATE OF THE STOMACH WITH FLATULENCE.*
- (6) *COSTIVENESS.*
- (7) *DIARRHOEA.*

These Complaints were generally in Patients whose Disease had been of a long Continuance, as in the Fever which run to the fourteenth or twentieth Day; they were likewise the Followers of a tedious Intermittent. As these Symptoms often appeared distinct we shall consider each of them; sometimes, however, two or three of them were seen together, for Example, the weak State of the Stomach and Bowels, the Hypochondriac Affection, and the Costiveness were frequently associated.

(1) *PECTORAL COMPLAINTS.*

These were very frequent; the Application of Blisters, small Doses of Ipecacuan occasionally repeated, with gentle Opiates in the Form of Dover's Powder or Antimony and Laudanum, a Milk and Vegetable Diet, and gentle

gentle Exercise, were found to be the best Method to remove these Complaints.

(2) *HYPOCHONDRIAC AFFECTION.*

A careful Attention to prevent the Patient from being by himself, a Change of Situation, Exercise, Chalybeate Preparations, and cold Bathing if no topical Affection prevented, were the Means we found most successful.

(3) *ABDOMINAL SWELLINGS.*

These either proceeded from Flatulence, from an Enlargement of the Liver, or from Water; if from the first, we refer to the Treatment of a weak State of the Stomach.

On Examination, if we found the Liver sensibly enlarged beyond the natural Size, accompanied with Pain on Pressure, we begun the Removal of it by the Application of a Blister, and gave neutral Salts to keep the Belly gently open; when the Pain went off, we anointed externally with a Scruple of Mercurial Ointment Morning and Evening, which we thought more effectual than Calomel internally, altho this Medicine was more commonly used; during this Procedure we continued the Use of neutral Salts, varying the Quantity as Occasion required, to procure a lax State of the Belly and promote Urine: If the Swelling of the Abdomen was evidently occasioned by Water contained in its Cavity, we adopted a different Practice; but for this, and the Treatment of (4) OEdematous Swellings in the Lower Extremities, we refer to Observations on Dropsy as occurring in the Army, which are intended for another Occasion, and may soon make their Appearance.

(5) *A WEAK STATE OF THE STOMACH WITH FLATULENCE.*

Chalybeates, Mineral Acids, Aromatics, Bitters, Absorbents, (among the best of which we found to be Lime-Water, or a weak Solution of Salt of Tartar, tho' Magnesia was often useful) Abstinence from Vegetables, Exercise and a free Air, were the most certain Means of restoring Tone to the Stomach, and removing the Flatulence. Infusions of Chamomile, or of the Wood of Simarouba, were found to be attended with good Effect in Complaints of this Kind.

(6) *C O S T I V E N E S S.*

Aloetic Preparations, Solutions of Alkaline Salt, and a laxative Diet soon procured a regular State of the Belly.

(7) *D I A R R H O E A.*

This was a very troublesome Consequence of Disease, and often baffled every Effort of Medicine. We have tried all the common Remedies, but in general without any good Effect. Opium freely used was found to be the best Astringent, we have given it to the Quantity of three or four Grains a Day, and we are convinced of having saved many valuable Lives by this Medicine. Until I was obliged to acknowledge the good Effects of Opium from Experience, I had my Doubts about its Utility; Dr. Clifton, a Gentleman well known in St. Christopher for his medical Abilities, confirmed me in the Idea I had formed of its Efficacy, by a candid Account of the happy Advantages he has received in this Disease from its Exhibition. Tho' we have continued giving Opium for Weeks, we never found any bad Effect or any Difficulty in discontinuing it. Milk, Starch Gruel, and Preparations of Sago, were found to be the best Articles of Diet.

C H A P. IV.

A Description of several Cases selected from the Table,
in the Order observed in the History of the Diseases.

S E C T. I.

Cases of the Intermittent.

C A S E I.

JOSEPH WATERS, (vide Table, Part I.)

Admitted the 6th of February, 1779.

Has been 4 Days ill.

AFFECTED with a Fever of the Tertian Stamp,
---Costiveness, and a Yellowness of his Eyes and
over the Surface are the only particular Appearances.
He expects a Return of his Paroxysm to Day about ten
o'Clock A. M. To have on the Disappearance of the
cold Stage the following Draught, and in the Evening
after the Paroxysm is over, half an Ounce of Glauber
Salt dissolved in a large Proportion of Water, and
taken at Intervals.

(a) The DRAUGHT.

*Take of Tartar Emetic half a Grain,
Liquid Laudanum thirty Gutts,
Common Water one Ounce:*

*The Tartar Emetic is to be dissolved in the Water,
then the Laudanum added, and the Whole
mixed.*

7th.

As expected, he had Yesterday a Return of Fever,
the Paroxysm commenced about half past ten A. M.
the

the first Stage of it continued one Hour; as directed he took the Draught which facilitated the sweating Stage, and abated the Severity of Symptoms; before four o'Clock P. M. there was a perfect Intermission of Fever, and he took his Salts, which procured him three large Stools, and a plentiful Discharge of Urine. This Morning he has no particular Complaint; the Yellowness of his Eyes is diminished, and his Tongue is moist and clean; he is ordered one Drachm of powdered Bark in a Glass of Chamomile Tea every Hour, and to continue it until next Morning. One Pint of weak Broth and one Glass of Wine are allowed for Dinner.

8.

He has taken ten Doses of Bark; had a good Night; Belly is regular; and this Morning he feels no Mark of a Return of Fever. The Bark to be omitted, and if the Paroxysm keeps off, to have the same Allowance for Dinner to Day as Yesterday, with the Addition of another Glass of Wine.

9.

No Return of Paroxysm Yesterday, and this Morning is free of Complaint; he is ordered to take the same Quantity of Bark as before, but only once in two Hours, and to be omitted next Morning by ten o'Clock.

11.

Continues free of Fever; Belly regular; good Appetite: Medicines to be discontinued, and to have for Dinner three Ounces of fresh Meat, one Pint of Broth and two Glasses of Wine.

17.

Apparently in good Health and was discharged.

This Man changed his Situation from South Side
Cul

Cul de Sac to Morne Fortune, and he had a Quotidian Attack on the 20th of March.

CASE II.

GEORGE INGLIS, (vide Table, Part I.)

Admitted the 24th of February.

Has been three Days ill.

A Tertian Intermittent whose Paroxysms are severe and of long Continuance forms his Disease. The only Thing remarkable is an Uneasiness in the Epigastric Region, a bad Taste in his Mouth, and Costiveness.

In the Beginning of this Month he was affected with a Headach, which went off in two or three Days by gentle Evacuations.

He had a Paroxysm Yesterday which commenced about eleven o'Clock A. M. the cold Stage continued one Hour, the hot four Hours, and the sweating Stage terminated the Fever two Hours after.

(b) ANTIMONIAL SOLUTION.

Take of Tartar Emetic six Grains,

Common Water one Pint :

The Tartar Emetic to be dissolved in the Water.

Of this Solution he is ordered to take one Ounce every half Hour until vomiting is produced, which he is to encourage by an Infusion of Chamomile; if he has no Stools two Hours after the Operation of the Emetic, he is directed to take half an Ounce of the Solution every two Hours until one or two is procured.

25.

Eleven o'Clock A. M. the Paroxysm commenced to Day about nine, the shivering Stage is now over, severe Headach, parched Tongue, and intense Heat characterise the hot Period. He is to take immediately the Draught

Draught (a), which is to be repeated an Hour after if the Severity of the Symptoms does not abate, and when the sweating Stage approaches he is desired to drink freely of any cool diluting Liquid. The Antimonial Yesterday produced Vomiting and gave several large Stools; the Matter thrown up was of a bitter Taste, slimy, and of a dark yellow Colour.

26.

The Fever terminated Yesterday sooner than was expected. About half an Hour after taking the Draught the intense Heat and Headach abated, and a Moisture on the Surface took place; in half an Hour more the sweating Stage was perfect; the Draught was not repeated, and about three o'Clock P. M. he found himself chearful and free of Fever. He has slept sound---had one Stool this Morning---feels pretty well.---Ordered to begin directly and take two Drachms of Bark every Hour if his Stomach can possibly retain it, if not, the Dose to be diminished and taken at longer Intervals. To have some Broth and a Glass of Wine for Dinner.

27.

Twelve o'Clock Meridian. No Return of Fever this Morning, nor any Mark of its Approach. He took Yesterday six Doses of Bark, and as he is presently free of Fever, and being two Hours after its usual Appearance; he is directed to begin and take it in the same Manner, and to have Yesterday's Allowance for Dinner.

28.

Free of Complaint; Belly regular; Appetite returning, and had no Return of Fever. The Bark to be discontinued to Day, but to take to Morrow Morning at six o'Clock one Drachm, and to repeat it every Hour until ten. To have a little Meat and two Glasses of Wine for Dinner.

1 March.

I March.

Taken his Bark; no Appearance of Fever; Medicines to be entirely discontinued. The same Diet to be allowed.

8.

Was discharged.

CASE III.

WILLIAM REID, (vide Table Part I.)

Admitted the 6th of February.

Has been six Days ill.

A Quotidian.---Anxiety, Prostration of Strength, and an Uneasiness in the Epigastric Region are the most remarkable Symptoms---Belly bound. He had a Paroxysm Yesterday about nine o'Clock which continued till near Evening; it is now the Hour mentioned, and he has Feelings of an approaching Fit; after the Commencement of the hot Stage to have the Draught (a), and to be allowed a free Use of Lemonade.

7.

Seven o'Clock A. M. The Paroxysm attacked him betwixt ten and eleven o'Clock Yesterday Forenoon; was less severe than usual, and its Periods more distinct and regular; the Intermission is rather imperfect; a slight Headach continuing, his Tongue foul, but Skin cool and Pulse regular. He is ordered immediately ten Grains of Ipecacuan, and in the Paroxysm to have the Draught as directed Yesterday.

8.

Eight o'Clock A. M. The Paroxysm appeared Yesterday about the same Hour as in the Day before; the Headach and Heat were not so intense; the sweating Stage came on sooner, and there is a good Intermission. He is directed to have three Drachms of Bark immediately

ately, and after the Paroxysm to take a weak Solution of Glauber Salt, not having a Stool for two Days past. The Emetic Yesterday operated and threw off a great Quantity of bilious Matter.

9.

Eight o'Clock A. M. Had a return of the Paroxysm at the usual Hour of shorter Duration and more severe; he took the Draught as before; the Bark was retained, and the Salts procured him two large Stools in the Evening. Ordered half an Ounce of Bark immediately, and after the Paroxysm a little weak Broth and a Glass of Wine.

10.

No Return of Paroxysm Yesterday, and he feels nothing of its Approach to Day.---The same Quantity of Bark to be repeated; and one Pint of Broth and two Glasses of Wine for Dinner.

11.

The Fever has not made its Appearance, he continues weak, but free of any particular Complaint. He is directed to take two Drachms of Bark this Morning, and the same Allowance for Dinner continued.

12.

Appetite returning; Belly regular; no Mark of a Return of Fever; Bark to be omitted. Diet as before.

14.

Allowed four Ounces of Meat, one Pint of Broth, and two Glasses of Wine at Dinner.

17.

So well as to be discharged; but on the 28th he relapsed.

1st March.

1 March.

The Paroxysms are now more irregular and more severe than at first; the Headach in the Time of the Paroxysm is intolerable; Tongue very foul, and the Uneasiness in the Epigastric Region is more remarkable than formerly; to these a constant Languor and Dejection are added: No Stool for two Days past. He is directed to take half an Ounce of the Antimonial Solution (b) every half Hour, until it excites Vomiting, and in the Paroxysm to have the Draught (a)

2.

Seven o'Clock A. M. The Emetic operated, and he had two Stools; the Paroxysm appeared about an Hour after the Vomiting, the sweating Stage came on earlier, and the Termination was more perfect; from his present Feelings the Fit is expected more early to Day; after the Termination of Fever he is desired to take two Drachms of Bark every Hour in a Glass of Wine and Water.

3.

Eight o'Clock A. M. It was eleven o'Clock before the Fever returned Yesterday; in the Paroxysm he took the Draught, which lessened its Duration and Severity; the Intermision is more perfect. He took two Doses of Bark last Night, and one this Morning; he is to take another in an Hour, and then to discontinue it until the Evening.

4.

Eight o'Clock A. M. The same Hour Yesterday he had a slight Return of Fever; his Tongue now is clean and moist; Belly regular; Appetite returning; Medicines to be continued, and to have some Broth, and two Glasses of Wine.

5.

5.

No Return of Paroxysm this Morning, nor any particular Complaint. He is ordered to take three Doses of Bark in the Course of the Day, and to have his Broth and Wine.

7.

Every Appearance of Fever gone; he feels a Hardness and Swelling of his Belly, and has been without a Stool for two Days; he took no Medicines Yesterday. Ordered this Morning the following Bolus, which is to be repeated in the Evening:

Take of Tartar Emetic one Grain,

Calomel four Grains,

Lenitive Electuary one Scruple:

To be intimately mixed.

8.

The Bolusses procured three large Stools, and the Swelling of his Belly is entirely removed. Medicines are to be omitted, and he is to have for Dinner three Ounces of Meat, with the usual Quantity of Broth and Wine.

18.

Has been free of Complaint since last Report, and he is now in so much Strength as to be discharged.

S E C T. II.

Cases of the Remittent.

CASE IV.

THOMAS TUDARS, (vide Table, Part I.)

Admitted the 20th of January.

Has been three Days ill.

H.

ANX—

ANXIETY, and a remarkable Prostration of Strength, a parched Tongue, Vomiting, Costiveness, Headach, Pain of the Back and Loins, increased Heat, and an irregular Pulse characterise his Disease.

These Symptoms were preceded by Shivering, and the common Fore-runners of Fever, and they have continued in nearly their present State, tho' always in the Morning there is a sensible Remission.

Saline Draughts in the Act of Effervescence are ordered, and a Blister to be immediately applied over the Stomachic Region, and his Legs occasionally fomented.

21.

The Vomiting has ceased, and there is an apparent Change for the better, by an Alleviation of every Symptom; the Headach however continues---no Stool---Injections of warm Water with a little Salt and Oil, to be thrown in until one Stool is procured; the Fomentations to the lower Extremities to be continued, and the saline Draughts repeated.

22.

A very uneasy Night, restless with some Degree of Delirium; this Morning the Headach is severe, Tongue parched, great Thirst, intense Heat, and an irregular quick Pulse; he retains his Drink; had two Stools by Injection Yesterday Afternoon, but none since; Urine very high coloured, and in small Quantity, The Injections to be repeated in the Afternoon if he has no Stool before that Time, and the Fomentations continued: Half an Ounce of the following Preparation is to be given every Hour, in Order to excite and maintain a gentle Nausea; Barley-Water or Toast and Water for common

common Drink, taking Care to give small Quantities at a time :

(c) *Take of Tartar Emetic one Grain,
Saline Julap eight Ounces:
To be formed into a Solution.*

23.

Yesterday Afternoon he had two Stools, the Antimonial and Fomentations excited a gentle Diaphoresis, and in the Evening he was apparently better; the Symptoms, however, returned with encreased Violence towards Midnight, and this Morning every Appearance is alarming; a Comatose Disposition with Insensibility present, and his Pulse exceeding low and feeble. The Fomentations are discontinued, and a large Blister is to be directly applied, to extend from the Nape of the Neck to the first Lumbar Vertebra; the following Medicine is to be given every two Hours---Wine and Water for common Drink.

*Take of Camphor three Grains,
Extract Bark thirty Grains,
Madeira Wine one Ounce:
The Camphor to be well rubbed with a little Spirit
Wine, the Extract to be dissolved in the Wine,
then the Whole mixed.*

24.

Yesterday Afternoon every Appearance indicated the greatest Danger; a Blister was applied to each Ankle, and the Quantity of Camphor in the Bolus was encreased to five Grains; towards Morning his Pulse became more equable, and now, which is about six o'clock A. M. a gentle Moisture covers the Surface, and he gradually becomes sensible; an Hour past he had a large Stool of a cadaverous Smell, and an unusual Flow of thick Urine. The Blisters are taken off and dressed, the Blankets are changed, and he has got a clean
H 2. Shirt;

Shirt; he asks for Punch which is allowed, and he is to have Wine occasionally.

*Take of Powdered Bark two Ounces,
Spirit Hartshorn one Drachm,
Common Water one Pint:*

To be well mixed.

Of this he is directed to take one Ounce every Hour, the Quantity to be encreased if his Stomach can possibly retain it.

25.

He has taken two-thirds of his Bark, and he continued in a favorable State all Yesterday; but in the Night an Alteration took Place, and his Medicines were omitted. This Morning every febrile Appearance is returned, except the Delirium and Insensibility; Pulse small and quick, Tongue dry, Thirst, intense Heat, a slight Difficulty of Respiration, Languor and Dejection, are the present Symptoms. A camphorated saline Draught, with the Addition of a very small Quantity of Tartar Emetic, is ordered at short Intervals, and a strict Attention given to the free Admission of Air.

26 to the 31, inclusive.

In these Days he was much in the same State as on the 25th, generally towards Morning he had a Remission, and on the 27th he was tolerably free of Fever all Day; he then took a Preparation of the Extract Bark, which was occasionally repeated; he had a Stool once in two Days, but the last was procured by Injection: Thin Soups, small Quantities of Wine, and cordial Medicines were alternately given.

1 February.

Appearances worse, the febrile Symptoms, and particularly the Delirium, have returned with encreased Severity;

Severity; Pulse more feeble and irregular, dry Tongue, intense Heat and Thirst, difficult Respiration. The saline Julap with Tartar Emetic is again given, another Blister is applied to the Back directly in the same Place with the former, and we have some Thoughts of shaving his Head, to prepare it for a Blister in the Evening.

2.

This Morning the Delirium is gone, and an evident Remission has taken Place; he had some Sleep in the Night, by which he was sensibly benefited; and he had a free Discharge of Urine, and a large Stool---his Head was not shaved.---Extract Bark in Scruple Doses dissolved in Wine, is ordered every half Hour, and if his Stomach can retain it the Quantity to be augmented.

3.

Since the Remission of Yesterday Appearances continue favorable; Skin moist, Tongue more clean, less Heat and Thirst: He has taken eight Scruple Doses of the Extract Bark. A Change of dried Linen is ordered, and he is to take his Bark once in two or three Hours. A little weak Soup for Dinner, and two Glasses of Wine.

4.

No Appearance of Fever; Skin cool, Pulse regular, Belly natural. Medicines are ordered to be continued. The same Allowance for Dinner.

15.

From the 4th to this Day he slowly recovered, could sit a little out of Bed, slept well, and what he eat was with Pleasure. He complains this Morning of a slight Gripping and Looseness; he took nothing Yesterday unusual. He is ordered to take the following Draught immediately, and to have thin Soup only for Diet:

Take

*Take of Powdered Rhubarb,
Magnesia, of each one Scruple,
Peppermint Water two Ounces:*

Mixed.

16.

The Medicine procured several large Stools; the Griping went off, but the Looseness continues, and he complains of an Acidity in his Stomach. He is directed to take thirty Grains of Magnesia in a Cup of Peppermint Water once in three or four Hours, and twenty Gutts of Laudanum at Bed-time. To have a Milk and Sago Diet.

17 to the 27 of March.

Every Medicine was tried to combat this Looseness, but without Effect; the most restorative Diet we could procure was given; Decoctions of Simarouba, Infusions of Terra Japonica, all the Variety of Earths, Bark, Opiates, and even Alum were exhibited.

He died on the 27th of March.

CASE V.

JOHN LITTLE, (vide Table, Part I.)

Admitted the 31st of January.

Has been four Days ill.

Nausea, Anxiety, Prostration of Strength and Dejection, increased Heat, Headach, foul Tongue, Thirst, Costiveness, a Parcidity of Urine which is very high coloured, and a yellow Tinge of his Eyes and Surface, constitute his Complaint.

These Appearances were ushered in by Shivering, &c. there is an Abatement of them towards Morning, and an Increase every Afternoon.

He

He is directed to take the Antimonial Solution (b), as in Case II. and to drink freely of any weak acidulated Liquor.

I February.

The Antimonial produced Vomiting and some Stools, towards Evening it excited a gentle Diaphoresis, which was encouraged by cool diluting Drinks; he has slept well in the Night, and this Morning his Skin and Tongue are moist; a slight Headach and Pain of the Back continue, from which we expect a quick Return of the Exacerbation of Fever; he is then to take the Draught (a), and to observe the same Method as Yesterday with Respect to Drink.

2.

About eleven o'Clock Yesterday Forenoon the Headach and Pain of the Back encreased, and he was sensible of a Coldness which continued near one Hour, then the common Symptoms of a hot Stage appeared: He took his Draught, and towards Evening a Moisture on the Surface took Place, with an Abatement of Symptoms. He slept some in the Night, and this Morning there is an evident Intermission. He is ordered directly half an Ounce of powdered Bark mixed in Water, with the Addition of a little Aromatic Tincture. To have the Draught (if necessary) as before.

3.

Yesterday at ten o'Clock A. M. he had an imperfect Attack of Fever; he took his Bark at Half past eight o'Clock and retained it; he likewise had his Draught: However, no perfect Solution of the Paroxysm has taken Place; he had a very restless Night, and this Morning his Eyes and Skin are of a deep Yellow, his Cheeks are of a dull Red, a foul Tongue, considerable Thirst, and an Encrease of Heat. An Ounce of the Antimonial
Pre-

Preparation (c) is to be given every Hour, in Order to excite Nausea and procure a Stool.

4.

Three Doses of the Antimonial vomited him, gave three very large Stools, and he had a copious Discharge of Urine; the present Appearances are, a remarkable Diminution of the Yellowness, a moist Tongue and Skin, a regular Pulse, and no disagreeable Heat.

Eight o'Clock A. M. to take two Drachms of Bark in Wine and Water every Hour, until three Doses are taken; Panada, when he finds himself in a Disposition for it, is also allowed.

5.

No Return of Fever, the favorable Appearances of Yesterday continue, and the Yellowness of the Surface is quite gone, a slight Tinge however in the Eyes is still observable. He is to take two Doses of Bark, in the same Manner as Yesterday, and to have some Broth and one Glass of Wine for Dinner.

8.

Eight o'Clock A. M. he continues free of Fever, had a good Night, no Stool since the 3d. The Bark to be omitted, and two Drachms of Glauber Salt taken directly. To have one Pint of Broth, and two Glasses of Wine for Dinner.

23.

From the 6th he gradually recovered Strength; for the last three Days he has been allowed Meat, and is now so well as to be discharged.

This Man was sent to the same Post from whence he came, and he relapsed into a similar Disease; but
with

with more severe Symptoms the 1st of March, vide Table.

III . T O H 3

C A S E VI.

WILLIAM ALLEN, (vide Table, Part I.)

Admitted the 27th of May.

Before this Man's Admission for two or three Days he had a bad Taste and Nausea, and at Times a little Headach with Vertigo, however he continued on Duty. These Complaints soon encreased, and were attended with other Marks of Fever; he was ordered an Emetic, and two Hours after its Operation the Draught (a). By these Medicines he vomited, sweated, and slept well; in the Morning of the 28th, he was attacked with Coldness, followed by a convulsive Shaking of his Arms, of a sudden he became Speechless with his Eyes sunk and fixed, his Breathing laborious and extremely foetid, the Heat of his Skin intolerable and full of livid Spots: He died in less than an Hour after the Attack. From the extraordinary Rapidity of Putrefaction, he was obliged to be buried two Hours after his Death.

Allen had a Remittent Attack on the 31st of January, of which he recovered, and was discharged the 15th of March; at this Time his Wife and Child died. For some Time after that Period, it was observed this poor Man turned fretful and dejected; these, however, gradually wore off, and he became chearful and more hearty and fat than usual; in this State he had the unfortunate Attack.

If this Patient had taken an Emetic on the first Appearance of Complaint, is it not probable that it might have prevented the fatal Consequence? Or if we had begun giving the Bark, in the greatest possible Quantity, immediately on his Admission, would it not have prevented the fatal Attack, or rendered it less severe?

S E C T. III.

Cases of the Dysentery.

CASE VII.

ALEXANDER WARDEN, (vide Table, Part I.)

Admitted the 16th of January.

GRIPEs, frequent Stools which are slimy and tinged with Blood, Tenesmus, Headach, dry Tongue, hot Skin, and a quick Pulse characterise his Complaint.

The Antimonial Solution (b) is ordered to be given in order to produce Vomiting and large Stools, and an Opiate at Bed-time; for common Drink Water Gruel, or Linseed Tea.

17.

The Medicine produced Vomiting, and gave several large Stools; the Gripping and Tenesmus however continue: The febrile Symptoms are more favorable.

(d) *Take of Tartar Emetic three Grains,
Liquid Laudanum two Drachms,
Common Water one Pint:*

*The Tartar Emetic to be dissolved in the Water,
then the Laudanum added, and the Whole mixed.*

Of this he is to take two Table Spoonfuls every two Hours, and to continue his Drink.

18.

Appearances this Morning are beyond our Expectations favorable; Stools are not so frequent and they are larger and less bloody, hard Lumps were voided two or three different Times Yesterday, the Gripping and Tenesmus are trifling, Pulse is regular, and Skin cool.
The

The Medicine to be continued once in four Hours, and to have a little thin Soup.

19.

No Stool since last Night, slept well, and Weakness is the only Mark of Disease remaining. He is ordered a cold Infusion of Bark, and to be indulged with thick Broth.

20.

Free of Complaint, Belly regular; the Bark to be continued for to Day and then omitted.

31.

Discharged.

CASE VIII.

JOHN ARDEN, (vide Table Part I.)

Admitted the 25th of January.

Frequent Stools with Griping, Headach, foul Tongue, bad Taste, and quick Pulse are the most remarkable Appearances of his Disease.

He was attacked with Shivering, and all the common Marks of Fever, soon after which the Griping and small Stools came on, and they have continued with the febrile Symptoms in their present State these two Days. He is directed to take the Antimonial Solution as in Case VII. and an Opiate at Bed-time.

26.

The Medicine has produced Vomiting, and given many large Stools, but he has had a very uneasy and restless Night; the Griping, Tenesmus, and febrile Symptoms are sensibly encreased. He is to take two Spoonfuls of the Preparation (d) every Hour until the Complaints are abated, and then only once in three

I 2

Hours;

Hours: Linseed Tea or Water Gruel for common Drink; his Feet, Legs and Belly are to be fomented at Bed-time.

27.

A tolerable easy Night, and this Morning the febrile Symptoms are nearly gone, a moist Tongue and Skin, his Stools larger and less frequent; he complains of a Pain in his Belly, in the Situation where the Colon forms its sigmoid Flexure. The Medicine to be continued every three Hours, Volatile Liniment applied to his Belly, and the Fomentations are to be repeated.

28.

Was pretty well all Yesterday, in the Afternoon the Pain of his Belly was quite gone, and he thought himself perfectly recovered; he slept well in the first Part of the Night, but towards Morning he awoke in a Shivering Fit, with a Return of the Gripping and frequent Stools; as the Shivering went off he accidentally took a Dose of his Medicine, an universal Diaphoresis was soon evident, and the Gripping and Inclination to Stool disappeared; and just now he has no particular Complaint. He is ordered one Drachm of Bark in a Cup of Chamomile Infusion every two Hours, and to have an Opiate one Hour before the Period of this Morning's Shivering.

29.

He has taken four Doses of Bark, and the Opiate as directed; he had a good Night, and no Return of Shivering or Gripping. The Bark to be continued, and to be allowed a little Broth,

30.

No Complaint, he had two regular Stools Yesterday. The Medicine to be omitted, and to have an additional Quantity of Broth, and two Glasses of Wine.

a. Fe-

2 February.

Continues well---Belly regular.

12.

Discharged.



C H A P. V.

Of Relapses.

EVERY Care which our Situation admitted proved ineffectual to prevent the Return of Diseases; indeed, there were certain Circumstances peculiar to it, which made this to a Degree almost impossible, and these may be reduced to,

1. *The Diet of Soldiers.*
2. *The Necessity of returning them very early on Recovery to Duty.*
3. *The Impracticability of sending them to more healthy Situations.*

When Patients were discharged from the Hospital, they returned to their usual Manner of Subsistence, on salt Pork or Beef; and the only Deviation they could make from this Diet, was by the Addition of a few Roots or Greens.

The indigestible Quality of salt Meat, particularly in weak Stomachs, is well known, and the bad Effects of it are more conspicuous in Cases where we cannot regulate the Quantity, or attend to the Manner in which it is cooked. Soldiers, when they are discharged from a
General

General or Regimental Hospital, should be confined for a proper Time to half their ordinary Allowance, and directed a suitable Kind and Proportion of Vegetables. If the salt Meat was soaked for a few Hours in warm Water frequently repeated, it would not only deprive it of its Saltness, but make it more easily assimilated to the Purposes of Nutrition; and instead of boiling this in the common Manner, if it was to be cut in Slices, and formed into a Kind of Stew with mucilaginous Vegetables, a very good Diet might be procured. Irregularity and Intemperance may be mentioned as Causes of the Relapses which happened, they certainly were; but the Obstinacy of some Individuals was such, that these Causes could not be always prevented.

Patients were generally kept in the Hospital from eight to twelve Days after the Termination of their Disease; this, however, depended upon the Degree of Strength. We were often obliged to send them away sooner than we could have wished, in order to make Room for recent and worse Cases. The most of them were allowed Bark with suitable Directions, but the Nature of the Service was so severe, that they were unavoidably ordered too soon on Fatigue, and we had them again in the Hospital a little Time afterwards. Vide Table, Part I.

The Period to which our Observations are confined, was a Time that would not admit of sending Convalescents, or recovering Patients, to Situations of superior Degrees of Healthiness; Morne Fortune, and the Vigie were the only Places which we had then in our Power to fix on, and these had no Conveniencies for the Reception of enfeebled Men, except (as we have already observed) what the temporary Hut could give, which was by no Means a Shelter from the inclement Weather. This being the Case, the Men on Recovery before the
Tone

Tone of their Fibres was sufficiently restored, were exposed to the same remote Causes as originally produced the Disease; and from our Knowledge of the Action and Effects of these Causes, we readily supposed that the Disease could not fail of being re-produced. How far Relapses depended upon a Habit induced, by the Effects of the former Disease on the System, without the fresh Application of external Causes; or on any supposed Influence of the Moon we did not determine.

Both the Intermittent and Remittent Fever (vide the Table) very often returned, and the Disease frequently varied its Form in the second Appearance: For Example; a Quotidian followed a Tertian, a Remittent a Quotidian; however, it sometimes happened that this Line was reversed, the Quotidian following the Remittent, the Tertian the Quotidian. In the first Cases the Treatment was always protracted, and troublesome Symptoms appeared as the Consequence of the Disease, which rendered the Recovery precarious and uncertain; in the second Cases the Treatment was quicker, and the Recovery more certain and permanent.

With Respect to the Use of Bark in preventing Relapses, the following Method was observed. After the Termination of Fever by that Medicine, it was given in smaller Doses, and continued for two or three Days, then it was omitted; for the Use of it in the same Doses beyond that Time had no Effect: I have seen Patients (without being able to ascribe any particular Cause) who have taken the Bark for eight Days after the Departure of their Fever, relapse during its Exhibition. The Bark being omitted for three or four Days, the Patient begun again and took two large Doses twice a Day, one of the Doses was given half an Hour before the Time the Fever usually attacked; this Method was persisted in for three Days, then discontinued, and repeated in the

the same Manner eight Days after---and so on for two or three Times. Some observed that taking the Bark for two or three Days at every Change of the Moon, was successful in preventing a Return of the Disease; but of this, we acknowledged our Incapacity of judging; however, the Method we prosecuted comprehended this Idea; for an eight Days Interval made the Period of Exhibition to be nearly about every Change of the Moon.

To prevent Relapses, and even the Formation of Diseases; Emetics, Glauber Salt, and Bark were left at the different Out-posts, and Directions lodged for the Exhibition of these Medicines with the Officer who commanded; but the only Advantage I think we derived from this Step, was an Expenditure of Medicine; and the Men having an Aversion to the Hospital, it afforded them a Pretence for staying at their Out-posts until their Diseases were so far advanced, that they became exceeding dangerous. These Consequences, however, we did not foresee, the Step at first had a specious Appearance, but we were in Time undeceived.

Upon the Whole we considered a Change of Air, a regulated Diet and Exercise, and a well conducted Cold-Bathing (if no topical Affection existed) as the only certain Means of preventing a Relapse, by being best calculated to restore the natural Vigour of the System.

St. Lucia as we have pointed out is not destitute of healthy Spots; a Removal to these, proper Accommodations, and a particular Attention to good Nursing, may render that Island less dreadful than it has unfortunately proved.

We sincerely wish the Gentlemen presently at the Head of the Hospital Department, will fulfill the Obligations

ligations they are certainly under to the Public, by communicating the Observations, which their Abilities, Attention, and Opportunities, must have enabled them to collect.

F I N I S.

lightness they are naturally ready to be led by
 commanding the Government, and to be led by
 the Government, and to be led by the Government
 them to collect.

61413

Rollo, John,

Observations on the Diseases which appeared in the Army on St. Lucia

Barbados 1780

Path. 1069 ly

urn:nbn:de:bvb:12-bsb10474346-1